

### 3.13 MINORITY AND LOW-INCOME POPULATIONS

Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (59 FR 7629, 16 February 1994), directs each Federal agency to “make...achieving environmental justice part of its mission” and to identify and address “...disproportionate high and adverse human health or environmental effect of its programs, policies, and activities on minority and low-income populations.” The Presidential Memorandum that accompanies EO 12898 emphasized the importance of using existing laws, including the *National Environmental Policy Act* (NEPA), to identify and address environmental justice concerns, “including human health, economic, and social effects, of Federal actions.”

The Council on Environmental Quality (CEQ), which oversees the Federal government’s compliance with EO 12898 and NEPA, has subsequently developed guidelines to assist Federal agencies in incorporating the goals of EO 12898 into the NEPA process. This guidance, published in 1997, was intended to “...assist Federal agencies with their NEPA procedures so that environmental justice concerns are effectively identified and addressed” (CEQ 1997a). Pursuant to EO 12898, this section identifies possible minority or low-income populations that might be subject to disproportionately high and adverse environmental impacts or health effects from the proposed Tucson Electric Power Company (TEP) Sahuarita-Nogales Transmission Line Project.

#### Methodology

The following discusses the methodology that the U.S. Department of Energy (DOE) used to identify possible minority and low-income populations in the project area.

**Minority Populations.** Environmental justice guidance defines “minority” as individual(s) who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic (CEQ 1997a). The Council identifies these groups as minority populations when either (1) the minority population of the affected area exceeds 50 percent or (2) the minority population percentage in the affected area is meaningfully greater than the minority population percentage in the general population or appropriate unit of geographical analysis.

For this Draft Environmental Impact Statement (EIS), DOE followed the environmental justice methodology used in the Durango Area Drainage Master Plan (ADMP) that was prepared for the Flood Control District of Maricopa County, Arizona, and submitted to the Federal Emergency Management Agency and the U.S. Army Corps of Engineers (Dibble 2000). This methodology is based on CEQ’s definition of minority populations, and expands upon the second criterion above by defining a “meaningfully greater” minority population if:

- It has proportions of ethnic minority groups that are at least an additional 10 percent greater than that tabulated for the United States in the 2000 census (i.e., minority percentage plus an additional 10 percent). Using this formula, the following are the specific ethnic minority thresholds used for this evaluation: (1) African American – 22.3 percent or greater, (2) American Indian, Eskimo, Aleut – 10.9 percent or greater, (3) Asian, Pacific Islander – 13.7 percent or greater, (4) Persons of Hispanic Origin – 22.5 percent or greater, and (5) Other race – 15.5 percent or greater (Census 2000d).

Since the Durango ADMP project was located in one of the most disadvantaged sections of Phoenix, Arizona, and the Durango ADMP was accepted by several Federal agencies, DOE determined that the Durango ADMP environmental justice methodology would be suitable for this EIS.

Applying the previously discussed criterion to identify minority populations, the following section details the minority composition of the area in close proximity to the proposed transmission corridors utilizing census block group data (data available from the 2000 Census that divide counties into census block groups for analysis).

**Low-Income Populations.** Environmental justice guidance defines “low-income” using statistical poverty thresholds from the Bureau of Census Current Population Reports, Series P-60 on Income and Poverty, by household (Census 2001). In identifying low-income populations, a community may be considered either as a group of individuals living in geographic proximity to one another, or a set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions of environmental exposure or effects.

For this EIS, DOE followed the environmental justice methodology used in the Durango ADMP (Dibble 2000), for the reasons previously discussed. The methodology for identifying low-income populations in the Durango ADMP is based on CEQ’s definition of low-income households, and establishes a threshold above which a population is considered to be a low-income population if:

- It has proportions of low-income households that are at least an additional 10 percent greater than that tabulated for the United States in the 2000 Census (i.e., incomes less than or equal to the official 2000 poverty rate of \$17,463 for a family of four). Using this formula, the specific low-income threshold used for this evaluation is 23.3 percent (i.e., the national poverty level of 13.3 percent plus an additional 10 percent) (Census 2000d).

Applying the above criterion to identify low-income populations, the following section details the low-income composition of the area in close proximity to the proposed transmission corridors utilizing census block group data (similar to the Durango ADMP) from the 2000 Census.

### **3.13.1 Western, Central, and Crossover Corridors**

Figures 3.13–1 and 3.13–2 present the census block groups in the project area and identify which of these census block groups have meaningfully greater minority and low-income populations, respectively. (Figure 3.13–3 shows the detail of block group boundaries for populated areas.) Tables 3.13–1 and 3.13–2 present the census block group data for Pima County and Santa Cruz Counties, respectively, that DOE used to prepare Figures 3.13–1 and 3.13–2. As shown in these figures, ten census block groups are intersected by the Central Corridor, and eleven census block groups are intersected by the Western and Crossover Corridors. Four of the intersected census block groups are in Santa Cruz County, and the remaining intersected census block groups are in Pima County.

Figure 3.13–1 shows that five of the intersected census block groups for the Central Corridor, and six of the intersected block groups for the Western and Crossover Corridors, exceed the meaningfully greater minority population percentage (of 22.5 percent for Hispanics, or of 10.9 percent of American Indians in the case of the block group on the San Xavier District Tohono O’Odham Reservation). None of the census block groups exceed the meaningfully greater minority population percentages for other minorities listed in the Methodology section.

Figure 3.13–2 shows that the one census block group that is intersected by all three proposed corridors exceeds the low-income population threshold value of 23.3 percent of households.

Table 3.13–1. Pima County Census Block Groups On and Near the Corridors.

Block		One Race						Two or	Hispanic		Below	Intersect Corridor?			Percent	Percent
Group	Total	African		American	Pacific			More	Non-	Hispanic	Poverty				Minority <sup>a</sup>	Below
ID	Pop	White	American	Indian	Asian	Islander	Other	Races	Hispanic	Hispanic	Level	Western	Crossover	Central		Level
9409001	1940	548	0	1294	0	0	16	82	1502	438	479				67%	25%
0043131	4701	3241	64	70	15	0	1108	203	2804	1897	1050				40%	22%
0041091	1588	1386	15	77	8	0	78	24	1342	246	60				15%	4%
0041061	7804	4818	647	285	19	13	1538	484	4045	3759	892				48%	11%
0043163	1247	1091	0	24	5	0	70	57	908	339	260	Y	Y		27%	21%
0043162	366	362	0	0	0	0	4	0	359	7	72	Y	Y	Y	2%	20%
0043142	526	377	0	12	0	0	134	3	293	233	53	Y	Y	Y	44%	10%
0043161	753	612	0	40	0	0	93	8	577	176	55	Y	Y	Y	23%	7%
0043164	1513	1170	0	0	16	0	226	101	702	811	304	Y	Y	Y	54%	20%
0041071	2944	2562	27	64	14	0	206	71	2203	741	304				25%	10%
0041081	2411	2109	12	3	0	0	217	70	1713	698	244				29%	10%
0043141	3073	2805	4	7	27	0	179	51	2433	640	182				21%	6%
0043181	1226	1142	0	0	0	0	24	60	1122	104	72				8%	6%
0043171	839	839	0	0	0	0	0	0	839	0	34				0%	4%
0043071	1144	1113	5	0	4	0	22	0	1084	60	26				5%	2%
0043172	859	859	0	0	0	0	0	0	838	21	18				2%	2%
0043182	2025	2020	0	0	5	0	0	0	1952	73	39				4%	2%
0043183	1024	987	0	14	0	0	0	23	1004	20	47				2%	5%
0041072	145	141	0	0	3	0	0	1	121	24	27				17%	19%
0043072	733	733	0	0	0	0	0	0	721	12	6				2%	1%
0043173	1223	1195	7	0	0	0	13	8	1196	27	52				2%	4%
0043151	2349	2313	0	5	10	0	17	4	2227	122	26	Y	Y	Y	5%	1%
0043152	2666	2656	0	0	0	0	0	10	2646	20	70				1%	3%
0043184	718	714	0	0	0	0	4	0	709	9	0				1%	0%
0043073	772	772	0	0	0	0	0	0	723	49	15				6%	2%
0043074	649	649	0	0	0	0	0	0	642	7	46				1%	7%
0043153	982	953	17	0	0	0	12	0	964	18	50				2%	5%

<sup>a</sup>Percent minority is based on percent Hispanic, as this is the largest minority, except in Block Group 9409001 on the San Xavier District Tohono O'Odham Reservation, where American Indians are the largest minority.  
Source: Census 2000d.

**Table 3.13–2. Santa Cruz County Census Block Groups On and Near the Corridors.**

Block																Percent
Group	Total	One Race						Two or More Races	Hispanic		Below Poverty Level	Intersect Corridor?			Percent Minority <sup>a</sup>	Percent Below Poverty Level
		White	African American	American Indian	Asian	Pacific Islander	Other		Non- Hispanic	Hispanic		Western	Crossover	Central		
ID	Pop															
9960001	858	792	4	8	3	0	34	17	748	110	42				13%	5%
9960002	854	763	0	13	3	0	67	8	541	313	214				37%	25%
9960003	318	272	0	4	0	0	25	17	245	73	61				23%	19%
9961011	402	339	0	0	13	0	26	24	297	105	65	Y	Y	Y	26%	16%
9961012	598	598	0	0	0	0	0	0	587	11	19	Y	Y	Y	2%	3%
9961013	766	627	0	16	0	8	108	7	335	431	73				56%	10%
9961021	5375	3692	67	15	44	0	1337	220	1441	3934	532				73%	10%
9961022	5900	3862	12	32	163	0	1681	150	914	4986	803	Y	Y	Y	85%	14%
9961023	1278	930	0	0	17	0	320	11	57	1221	448				96%	35%
9961024	322	296	2	0	0	0	22	2	149	173	22				54%	7%
9962001	296	289	0	0	0	0	0	7	26	270	85	Y	Y	Y	91%	29%
9962002	2627	2122	0	10	0	0	484	11	100	2527	1210				96%	46%
9963001	889	687	0	0	2	0	200	0	134	755	120				85%	13%
9963002	2872	2143	11	0	0	0	634	84	103	2769	554				96%	19%
9963003	1546	1212	0	0	0	0	334	0	38	1508	564				98%	36%
9963004	2425	1670	12	8	8	0	705	22	131	2294	1207				95%	50%
9964011	1529	1249	0	0	0	0	149	131	103	1426	392				93%	26%
9964012	2116	1566	5	14	17	0	438	76	69	2047	766				97%	36%
9964021	2274	1793	0	54	39	0	319	69	237	2037	637				90%	28%
9964022	2725	2055	6	58	0	0	529	77	91	2634	1279				97%	47%

<sup>a</sup>Percent minority is based on percent Hispanic, as this is the largest minority.

Source: Census 2000d.